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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Digital Audio Broadcasting Systems	)	
And Their Impact On the Terrestrial Radio	)	MM Docket No. 99-325
Broadcast Service.	)	

To: The Commission

COMMENTS OF FORUM COMMUNICATIONS COMPANY (WDAY-TV)

Forum Communications Company ("Forum"), licensee of WDAY-TV, Channel 6, Fargo, North Dakota, by its attorneys, hereby submits its Comments in response to the Notice of Proposed Rule Making released November 1, 1999 in the above-captioned proceeding (the "NPRM"). As demonstrated herein and in the attached Technical Statement, one of the NPRM's alternative proposals would work severe hardship on the licensees of television stations operating on Channel 6 and upon their respective communities and service areas. Accordingly, it should be rejected.

Of primary importance to Forum is the history of public service that WDAY-TV has performed for the people of its city of license, the Fargo-Moorhead DMA, and in the States of North Dakota and Minnesota in general. For these people, this public service is synonymous with "Channel 6," and has been since 1953 when the station first signed on the air. In economic terms, this is a matter of "good will," the value accorded to the reputation of a business -- in this case, considerable value. In a broader public interest context, however, it also is a matter of consistency and

dependability as a news source, an entertainment provider, and a community voice for nearly half a century. The reassignment of Channel 6 would mean far more to the people of the WDAY-TV than the mere creation of an empty gap between Channels 5 and 7, it would constitute the loss of a long-standing community focal point.

Moreover, as a technical matter, operation on Channel 6 as a DTV station will afford WDAY-TV the continued ability to serve persons whose DTV service via a UHF channel may not be as reliable or thorough as can be provided via a VHF channel such as WDAY-TV's Channel 6. As shown in the attached Technical Statement prepared by Charles A. Cooper of duTreil, Lundin & Rackley, Inc., the Commission itself has recognized the unique technical characteristics of low band VHF channels, particularly for propagation. Indeed, it acknowledged this advantage specifically with respect to Channel 6. Technical Statement at 1-2.

As Mr. Cooper indicates, VHF signals are better able to survive in irregular terrain than are UHF signals. Because propagation of VHF signals is superior to UHF propagation behind terrain obstacles, it may be assumed that DTV receivers located behind terrain obstacles will be better served by low band VHF signals than by UHF. Specifically as to the WDAY-TV viewing area, approximately one-half of the affected population is located in non-line-of-sight areas. Based on DTV experimental transmissions conducted by the National Association of Broadcasters, it will be more difficult for such viewers to receive DTV transmissions via UHF. Technical Statement

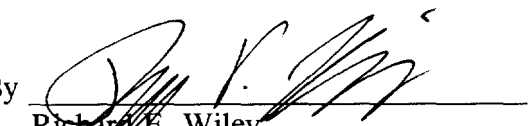
at 4-5. Accordingly, Forum believes it to be crucial to service of its viewing area that it be able to continue service on Channel 6 after the transition to DTV.[1]

Conclusion

For the reasons expressed in the foregoing, Forum respectfully requests that the Commission reject the alternative proposal at issue, and retain Channel 6 for television broadcast service so that all residents of the viewing area can continue to receive service even in the digital audio and video age.

Respectfully submitted

FORUM COMMUNICATIONS COMPANY

By 

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January 24, 2000

[1] Moreover, as Mr. Cooper indicates, the electrical power demands of a VHF transmitter are considerably less costly that those of a UHF transmitter affording comparable coverage. See Technical Statement at 5-6.

du Treil, Lundin & Rackley, Inc.
A Subsidiary of A.D. Ring, P.A.

TECHNICAL STATEMENT
FORUM COMMUNICATIONS COMPANY
COMMENTS IN MM DOCKET NUMBER 99-325

This Technical Statement supports the comments of Forum Communications Company (herein "Forum") in the Notice of Proposed Rulemaking in MM Docket Number 99-325. In the DAB Notice, the FCC is considering alternative approaches to the introduction of Digital Audio Broadcasting (DAB) Systems and their impact on the terrestrial radio broadcast service. Forum is the licensee of NTSC Channel 6 television station WDAY-TV at Fargo, North Dakota. These comments specifically address the proposal in the DAB Rulemaking to reallocate the six megahertz of spectrum at 82-88 MHz, used for TV channel 6, to DAB service at the end of the DTV transition. Forum opposes the reallocation of the TV-6 spectrum to DAB and wishes to preserve its right to operate the DTV operation on TV-6 after the transition.

FCC Comments on Preserving TV-6 in Past DTV Proceedings

In the DTV proceeding, MM Docket No. 87-268, the Commission considered, and ultimately rejected, the elimination of TV Channels 2-6 from the "core" television spectrum.[1] Not withstanding the effects of impulse noise and interference to and from FM radio service, the Commission observed "the lower VHF channels 2-6 offer unique technical characteristics for broadcasting, particularly

with regard to propagation."[2] Furthermore, the Commission stated that "there are propagation limitations for TV service on higher UHF channels." Therefore, the Commission tentatively reserved the low band VHF channels for DTV.

In a subsequent order, the Commission concluded "there is no engineering evidence available at this time to indicate that these channels (low-VHF channels) are unsuitable for DTV operation and such channels offer desirable propagation characteristics for television service. We therefore recognize the benefits of including these channels in the core spectrum."[3] The Commission further stated that "postponing a decision on the low-VHF channels has raised uncertainties for licensees whose existing and/or DTV channels are in that portion of the spectrum" and "we further understand that these uncertainties can make planning for DTV service more difficult and burdensome." The Commission concluded that "we now believe that the most desirable course of action is to expand the core to include all channels 2-51."

The Commission also addressed specifically the preservation of TV-6 in the DTV proceeding. The Commission stated "We continue to believe that it is important to maintain the availability of channel 6 for television service. Channel 6 has advantageous propagation properties and has proven very desirable for television operation - as indicated by the fact that there are currently more than 55 NTSC television stations on this channel. We believe that

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[1] The core spectrum, after the transition, was ordered to be Channels 2-51.
[2] Sixth Report and Order in the Matter of Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, MM Docket No. 87-268, paragraph 82.
[3] Memorandum Opinion and Order on Reconsideration of Sixth Report and Order in the Matter of Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, MM Docket No. 87-268, paragraph 41.

it would be more undesirable to remove channel 6 from the core spectrum or to impose additional restrictions on use of this channel for DTV service after the transition."[4]

Propagation Characteristics

Television channel 6, like all low VHF channels (channels 2-6), has more favorable propagation characteristics than due UHF stations. This enables a low channel VHF station to serve a larger service area than a comparable UHF station.

One of the principal factors that permits a propagation advantage of VHF signals is that UHF signals attenuate to a greater degree than VHF signals when confronted with irregular terrain. In a study of UHF propagation, the Commission noted that "Because of the effect of shadowing, the coverage of UHF and VHF stations may be very different. If the terrain within a particular television market is very irregular (many hills and valleys), UHF reception as one travels away from a transmitting antenna in a straight line may vary from excellent to non-existent back to excellent again over a relatively short distance. VHF signals may vary also, but not to the extremes that UHF signals will."[5]

The ability of VHF signals to propagate behind terrain obstacles and beyond the radio horizon permits increased reception (or better service availability) of

[4] Second Memorandum Opinion and Order on Reconsideration of Fifth and Sixth Report and Orders in the Matter of Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, MM Docket No. 87-268, paragraph 57.
[5] Comparability of UHF Television, A Preliminary Analysis, UHF Comparability Task Force, Office of Plans and Policy, Federal Communications Commission, September, 1979, page 64.

these stations than for UHF stations, regardless if NTSC or DTV signals are transmitted. An example of the loss of DTV service availability behind terrain obstacles was documented in UHF DTV testing which occurred in Raleigh. The test report stated with respect to UHF DTV that "a non-line-of-site location had a greater chance of losing margin and experiencing increased amounts of multipath."[6] Further examination of the report determined that the service availability of these UHF DTV signals decreased from 92.4 percent of all line-of-sight test locations being able to receive DTV to only 66.7 percent of the test sites obstructed by terrain being able to receive DTV. Based on these tests, it can be concluded that a significant number of UHF DTV receivers, when located behind terrain obstruction(s), will not be able to receive DTV signals.

While no publicly available DTV testing, known to the undersigned, has occurred in the lower VHF channels (besides the limited 1994-1995 Charlotte Tests), it is believed that the superior propagation characteristics of the low VHF channels (including Channel 6) will provide better service availability to DTV receivers located behind terrain obstacles than a comparable UHF DTV facility.

The degree of terrain obstructions and area beyond the radio horizon was calculated for WDAY-TV at Fargo. As can be calculated from Figure 1, 19,500 square kilometers within the WDAY-TV Grade B coverage contour are beyond line-of-sight. That is one-half of the area within the Grade B coverage contour. With respect to population, 160,400 persons reside within these non line-of-sight areas according to the 1990 U.S. Census. This is again

[6] WRAL-HD DTV Field Testing. Presented April 8, 1998 at the National Association of Broadcasters (NAB) Broadcast engineering conference.

approximately one-half of the total population residing within the Grade B coverage contour.

If one-half (160,400 persons) of the WDAY-TV population is located in non line-of-sight areas, than it is expected that 53,400 persons would not be able to receive a DTV signal from a UHF facility. This is based on the 66.7% UHF DTV service terrain obstructed availability statistics derived from the aforementioned 1998 Raleigh tests. While a 100% service availability from non line-of-sight DTV receivers served by a VHF station is unrealistic, greater availability from a VHF DTV facility than that expected from a comparable UHF facility is expected. Therefore, Forum wishes to preserve the right to return to Channel 6 after the transition if further testing confirms greater DTV service availability.

Economic Benefits

Since VHF stations operate with lower effective radiated powers than UHF stations, Forum will receive a cost savings by operating Channel 6 after the transition rather than their present DTV UHF transition channel. The maximum UHF DTV effective radiated power is 1,000 kilowatts; the maximum low VHF DTV effective radiated power is 45 kilowatts. A preliminary estimate indicates a savings of approximately 130 kilowatt hours of electrical power between the VHF and UHF transmitters. If a power cost of $0.05 per kilowatt hour is assumed, than a yearly on-going cost

savings of approximately $57,000 can be obtained by operating a low VHF DTV station compared to a UHF station.

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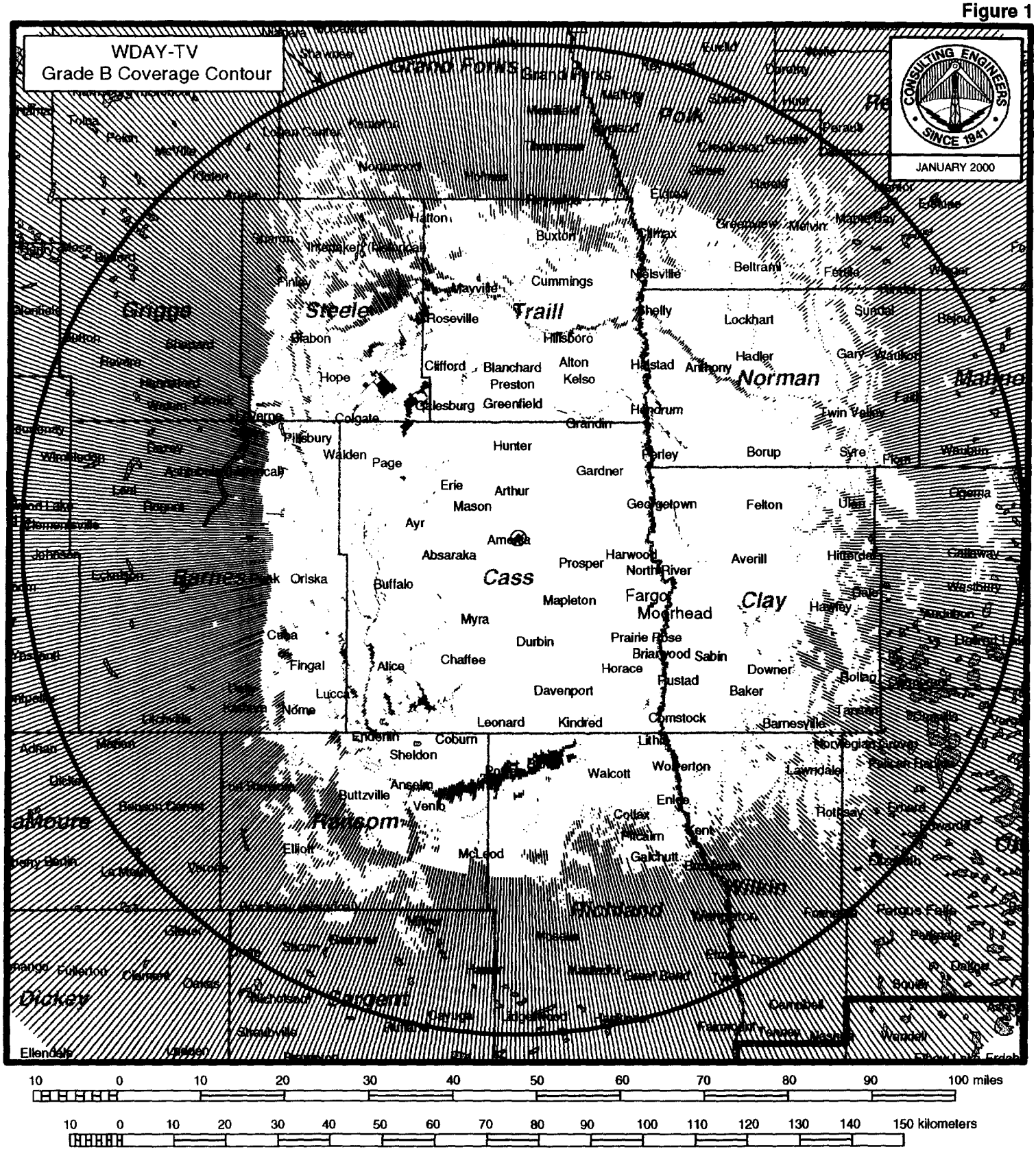
January 20, 2000

Figure 1



WDAY-TV TERRAIN SHADOWING

PREPARED ON BEHALF OF FORUM COMMUNICATIONS COMPANY

du Treil, Lundin & Rackley, Inc., Sarasota, Florida